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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,448	09/08/2003	Michael J. Sullivan	B03-57	4719

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EXAMINER

HUNTER, ALVIN A

ART UNIT	PAPER NUMBER
3711	

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,448

Applicant(s)

SULLIVAN ET AL.

Examiner

Alvin A. Hunter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 12-22 is/are allowed.
- 6) ☒ Claim(s) 23-27, 34, 35, 44 is/are rejected.
- 7) ☒ Claim(s) 11 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/08/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Objections***

Claims 11 and 33 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 1 and 23 require the presence of a reactive co-agent. Having no reactive co-agent does not limit that of claims 1 and 23.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-26, 34, 35, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruko et al. (USPN 6419595).

Maruko discloses a golf ball having a core layer (1), a first intermediate layer (2), and cover layer (5) (See Figure 1). The core layer comprises

- a) an elastomeric composition,
- b) a reactive co-agent in amounts of at least 10 wherein the term "about" will be defined as any value within +/-1 of the range being claimed, and
- c) a crosslinking agent (See Column 2, lines 26 through 50).

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The core layer has a Shore D hardness of at least 40, or at least 69 Shore C; the intermediate layer has a Shore D hardness of up to 55 and no less than 10, or 24 to 89 Shore C; and the cover layer has a hardness of at least 45, or at least 70 Shore C (See Column 2, lines 54 through 58; Column 3, lines 12 through 17 and 59 through 64).

Maruko et al. notes that the hardness relationships improves the spin and feel of the golf ball; therefore, one having ordinary skill in the art would have found it obvious to having each layer of a particular hardness in order in order to improve the spin and feel of the golf ball (See Summary of the Invention).

In regards to claim 24, the core layer is made of a diene rubber (See Column 2, lines 26 through 35).

In regards to claim 25, the crosslinking agent is peroxide (See Column 2, lines 44 through 50).

In regards to claim 26, the diene rubber is polybutadiene (See Column 2, lines 26 through 35).

In regards to claim 31, it is noted that styrene butadiene may be blended with the core layer (See Column 2, lines 26 through 35).

In regards to claims 34 and 35, the reactive co-agent is zinc diacrylate (See Column 2, lines 36 through 43).

In regards to claim 44, the core layer has a diameter of 26 to 35mm (See Column 2, lines 23 through 25).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruko et al. (USPN 6419595) in view of OFFICIAL NOTICE.

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Maruko et al. does not disclose having a sulfur crosslinking agent.

OFFICIAL NOTICE is taken that it is conventional within the art to crosslink, or vulcanize, polybutadiene with sulfur. One having ordinary skill in the art would have found it obvious to use sulfur as a crosslinking agent because of its common convenience to the art.

***Allowable Subject Matter***

Claims 1-10 and 12-22 are allowed.

Claims 28-32 and 36-43 are objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

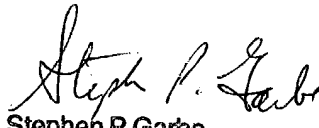
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Garbe, can be reached on 703-308-1207. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alvin A. Hunter, Jr.



Stephen P. Garbe  
Primary Examiner